

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-26 are pending in this application. Claims 1 and 15 are amended, and support for the amendment is found at least at page 22, lines 18-21 and Figure 11 of the Applicants' specification. Claims 27-36 are canceled without prejudice or disclaimer. It is respectfully submitted that no new matter is added by this amendment.

In the outstanding Office Action, Claims 1 and 15 were objected to under 37 C.F.R. § 1.75(a) and (d)(1) as failing to particularly point out and distinctly claim the subject matter of the invention; Claims 1-2, 6, 15-17, 20-21, 26 and 30 were rejected under 35 U.S.C. § 102(e) as anticipated by Takayama (U.S. Patent No. 6,477,528); Claims 3, 9, 27 and 33 were rejected under 35 U.S.C. § 103(a) as unpatentable over Takayama in view of Nakagawa et al. (U.S. Patent No. 5,819,295, hereinafter Nakagawa); Claims 4-5, 28-29, 34 and 36 were rejected under 35 U.S.C. § 103(a) as unpatentable over Takayama and Nakagawa, further in view of Murata (U.S. Patent No. 6,606,161); and Claims 7-8, 10-11, 13, 18-19, 22-25 and 31-32 were rejected under 35 U.S.C. § 103(a) as unpatentable over Takayama in view of Murata.

In response to the objection to Claims 1 and 15, Claims 1 and 15 are amended thereby deleting the objected to language. Claims 1 and 15 are amended to be consistent with the original claim language and specification. Therefore, it is respectfully requested that the objection be withdrawn.

With regard to the rejection of Claims 1-2, 6, 15-17, 20-21, 26 and 30 under 35 U.S.C. § 102(e) as anticipated by Takayama, this rejection is respectfully traversed.

In the past, image data stored in the image data storing means were managed on the basis of a single image file, including one or more pages. Therefore, it was not possible to read out only particular pages of a plurality of pages (e.g., page 1 of an image file A and page

2 of an image file B). In fact, to print a particular page of a single image file, it was customary for a user to read the entire image file including the particular page out of an image storage causing the operator to select the particular page, and to output the page selected. This type of procedure is very time consuming, and the problem becomes more serious when using a removable storing medium having a low reading rate or when an image file includes a number of pages.<sup>1</sup>

In light of these and other difficulties, the Applicants developed the present invention. To this end, Claim 1 recites, *inter alia*, an image forming apparatus including:

means for separating image data into a plurality of single unit images;  
first managing means for generating first management information  
used to manage the image data on a single unit image basis; and  
second managing means for generating second management data used  
to manage an image file that comprises at least one of the plurality of single  
unit images.

Claim 15 recites analogous features. An exemplary example of the first management information and second managing data is shown in Figure 11. More specifically, an exemplary example of the image attribute management data is shown in Figure 13 that includes an image file including 4 single unit images in which the blocks used to store each single unit image of the image file are identified. Therefore, through the claimed configuration discussed above, it is possible to selectively output a designated part of an image file.<sup>2</sup>

Takayama is directed to a file management system, an electronic filing system, and a hierarchical structure display method that visually and comprehensively presents the location of a file to the user when a file is recorded, managed, or retrieved.<sup>3</sup> Takayama discloses a database including a page management table and document management table, but does not disclose a “means for separating image data into a plurality of single unit images,” as recited

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<sup>1</sup> Specification, page 3, line 17 - page 4, line 7.

<sup>2</sup> Specification, page 23, lines 9-13.

<sup>3</sup> Takayama, column 1, lines 55-62.

in amended Claim 1. Therefore, Takayama does not teach each and every element recited in amended Claim 1, and it is respectfully requested that the rejection be withdrawn.

Further, as shown in Figure 4 of Takayama, a page corresponds to a product catalog, unexamined Japanese patent application, and Japanese patent. Therefore, the page recited in Takayama does not correspond to the single unit image as recited in amended Claim 1. As discussed above, Takayama is directed to a hierarchical structure display method to visually present the location where a file is stored, whereas Claims 1 and 15 as currently written are directed to “separating image data into a plurality of single unit images,” “generating first management information used to manage the image data on a single unit basis,” and “generating second management data used to manage an image file that comprises at least one of the plurality of single unit images.”

Moreover, the cited references of Nakagawa and Murata are not believed to cure the deficiencies of the primary reference to Takayama. Therefore, it is also respectfully requested that the prior art rejections of dependent Claims 2-14 that depend from amended Claim 1 and Claims 16-26 that depend from amended Claim 15 also be withdrawn.

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Reply to Office Action of July 13, 2004

As no other issues are believed to remain outstanding relative to this application, it is believed to be clear that this application is in condition for formal allowance and an early and favorable action to this effect is, therefore, respectfully requested.

Respectfully submitted,

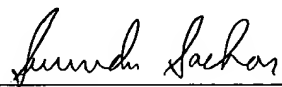
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